

Nika

PROJECT: GEAR5

Group 10

Team Leader:

Ralph Robes, N01410324

Members:

Elijah Tanimowo, n01433560

Francisco Santos, n01423860

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Student names and ids

Name	Id	Signature	Effort
Ralph Robes	N01410324	<i>Ralph Robes</i>	100%
Francisco Santos	N01423860	<i>Francisco Santos</i>	100%
Pradeep Singh	N00975892	<i>Pradeep Singh</i>	100%
Elijah Tanimowo	N01433560	<i>Elijah Tanimowo</i>	100%

Invitation Hardware Prof

<input type="checkbox"/>	 AustinCENG Awaiting AustinCENG's response	Pending Invite 	Remove
<input type="checkbox"/>	 ElijahTanimowo3560 Collaborator		Remove
<input type="checkbox"/>	 FranciscoSantos3860 Collaborator		Remove
<input type="checkbox"/>	 Hak11 haki11 • Collaborator		Remove
<input type="checkbox"/>	 PradeepSingh0573 Collaborator		Remove

Project Scope and goals

The goal and ambition of our project are to create an interactive arcade console. The technology in this machine and the wireless software created for our app will allow customers to play arcade-style games. We will make a list of the essential duties that the assignment needs in order to run well, and we will allocate one person to each duty. The project will be finished once all of these important activities have been accomplished. When everything is finished, we may continue working on unrelated activities to enhance and add to the project even if they are not necessary

for it to function fully. The finished project should be an arcade system with both analogue and digital controls.

GitHub Repo and Strategy

<https://github.com/RalphRobes0324/Nika.git>

The strategy between us was to split the work up equally, we created a document at the beginning of our work effort and we organized the tasks that had to be done in sections. We would then write our name beside the description of the activity that represents what we had to do, and in the 3rd tab beside the activity would be a color representing our progress. Red would mean it's incomplete or not started, yellow would represent that the activity is in progress or almost finished, and green says that the activity is complete. With this strategy, we could organize all of our tasks' information and successfully complete them.

Additional features/functionality added

Between the progress of Deliverable 1 and Deliverable 2, the app has changed in many ways. The points below are the listed ways. The coding progress we did went a long way, we added multiple new fragments and new activities to our project. When you enter the app you now need a login to sign in, otherwise, you can register. This registration requires both name and password to be above a certain length and the password has a confirmation with a second text field to make sure the user knows the password. After you log in it takes you to the main activity where you can access the bottom navigation into our fragments. You can access the menu containing menu items from the main activity and any of those fragments. The settings menu item takes you to the settings fragment.

- Splash Screen added
- Designed Fragments for Play, Score, Profile, and Settings
- Runtime Permission in the form of gallery permissions for use on Profile fragment added
- Multiple Images with each having different resolutions added
- French Translation added
- Portrait and Landscape Support added
- Database connection added
- Ability to register and log in with your account is added.
- Menu with menu items added

STORIES & TASKS

Story 1: Email or phone text capabilities in order to send users free currency to incentivize them to use our app more

- Task 1: Add a section for the user to add email/phone number and save it to the database
- Task 2: Create an automated system that sends an email/text on a regular basis i.e once per month
- Task 3: Have a one-time email/text with free currency sent to new users(can detect if their phone number/email is already in the database)
- Task 4: Add system for the user to change their phone number or email address
- Task 5: Add system for the user to remove the phone or email(database could hold this info for a period of time in case they change their mind and so the free currency emails/text couldn't be abused)

Story 2: Leaderboard where users can compete for rewards, thus improving their experience

- Task 1: Code to create leaderboard with usernames from the database
- Task 2: Code to display scores collected from the database
- Task 3: Add code to reset leaderboard on monthly intervals
- Task 4: Database will find the top 3 users with the highest scores and add currency to their account during the leaderboard reset
- Task 5: Allow user to opt in/out of leaderboard(if opted out they can't get prizes)

Story 3: Partner with Twitch/Youtube streamers to allow users to see early footage of gameplay and receive in game bonuses

- Task 1: Pay content creators to promote our gaming system.
- Task 2: Put our ads in gaming-related YouTube content in order to reach our intended audience
- Task 3: Make ads short and engaging in order to save money while still generating interest

- Task 4: Give streamers codes that they can then send out to their fans
- Task 5: Work with Twitch to add drops for free currency/skins

Story 4: Customization for users, where they can change most aspects of the game for personalization and comfort. Supports users with disabilities by allowing them to move and position controller functionality

- Task 1: Add additional coding to allow the user to change joystick position
- Task 2: Add additional coding to allow user to change button position
- Task 3: Add additional coding to allow user to change background
- Task 4: User can use additional parts in order to modify their system to their liking
- Task 5: User can have custom images for Avatar in their profile

Story 5: Development for users, where they can create their own games in order to earn some money

- Task 1: Add fragment for user development
- Task 2: Add store, where users can buy other user created games
- Task 3: Add system for user to convert their game currency into their local currency
- Task 4: Add tools for user to easily create games
- Task 5: Add creator benefits, where users who create games get additional rewards based on the games sales and popularity

STORIES & TASKS TRELLO

Email or phone text capabilities ...

- Add a section for the user to add email/phone number and save it to the database
- Create an automated system that sends an email/text on a regular basis i.e once per month
- Have a one-time email/text with free currency sent to new users(can detect if their phone number/email is already in the database)
- Add system for the user to change their phone number or email address
- Add system for the user to remove the phone or email(database could hold this info for a period of time in case they change their mind and so the free currency emails/text couldn't be abused)

+ Add a card

Leaderboard where users can compete for rewards, thus improving their experience ...

- Code to create leaderboard with usernames from the database
- Code to display scores collected from the database
- Add code to reset leaderboard on monthly intervals
- Database will find the top 3 users with the highest scores and add currency to their account during the leaderboard reset
- Allow user to opt in/out of leaderboard(if opted out they can't get prizes)

+ Add a card

Partner with Twitch/YouTube streamers to allow users to see early footage of gameplay and receive in game bonuses ...

- Pay content creators to promote our gaming system.
- Work with Twitch to add drops for free currency/skins
- Make ads short and engaging in order to save money while still generating interest
- Put our ads in gaming-related YouTube content in order to reach our intended audience
- Give streamers codes that they can then send out to their fans

+ Add a card

Customization for users, where they can change most aspects of the game for personalization and comfort. Supports users with disabilities by allowing them to move and position controller functionality ...

- Add additional coding to allow user to change joystick position
- Add additional coding to allow user to change button position
- Add additional coding to allow user to change background
- User can use additional parts in order to modify their system to their liking
- User can have custom images for Avatar in their profile

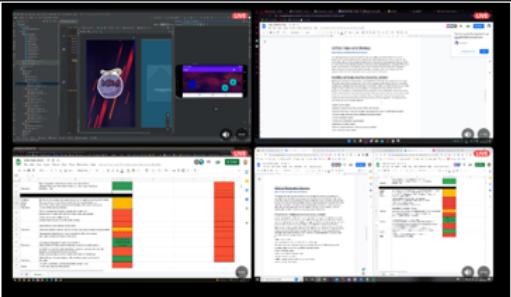
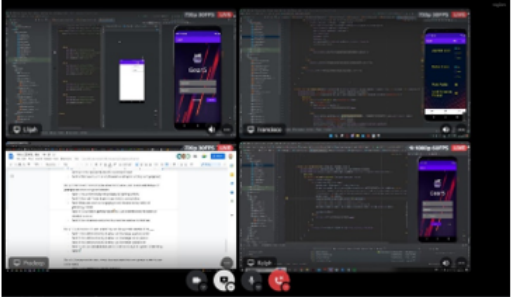
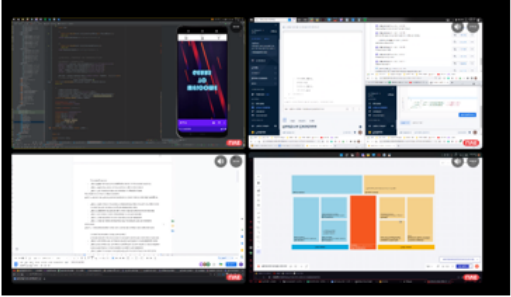
+ Add a card

Development for users, where they can create their own games in order to earn some money ...

- Add fragment for user development
- Add store, where users can buy other user created games
- Add system for user to convert their game currency into their local currency
- Add tools for user to easily create games
- Add creator benefits, where users who create games get additional rewards based on the games sales and popularity

+ Add a card

Table records the daily stand-ups outcome

Meeting	Outcome	Screenshot
<p>1</p> <p>October 8th,2022</p>	<ul style="list-style-type: none"> Created Splash, Play, Profile, Score screens without functionality Added Menu options with icon 	
<p>2</p> <p>October 9th,2022</p>	<ul style="list-style-type: none"> Created Login fragment and added login activity feature Added Buttons to Play fragment, Interface to Register fragment and also settings. Added/Updated Icons and Logo redesign for APP Added Landscape orientation and French values Snackbar implementation with runtime permissions 	
<p>3</p> <p>October 10th,2022</p>	<ul style="list-style-type: none"> Added Github Repo & Strategy Additional Features/functionality added Github collab invite to Austin Tian Stories and Tasks Finishing up and polishing deliverable 2 documentation 	

DB cloud

We are utilizing Firebase as a database cloud. We are utilizing it because it is a component of Android Studio and is simple to set up. Additionally, the Real-Time Database was used for this project since it automatically updates with the user's creation time.

Storage user's information

```
https://nika-gear5-default-rtdb.firebaseio.com/
|
└─ users
    |
    └─ adminadmin
        |
        ├── currency: 1000
        ├── password: "admin"
        ├── topScore: 0
        └── username: "admin"
```

The Firebase Real-Time Database will get the user's newly created account. Based on the ID of the user that was created for them, this allows passwords and usernames to be kept in the cloud. When a user account is established for the first time in the app, the user's highest score and currency are added.

Storage Rules

```
{
  "rules": {
    ".read": "now < 1667800000000, // 2022-11-8
    ".write": "now < 1667800000000, // 2022-11-8
  }
}
```

Storage rules support test mode, private mode, and lock mode. This makes it possible for app data to be saved on the cloud.

Tasks with start/end date, size, and priority

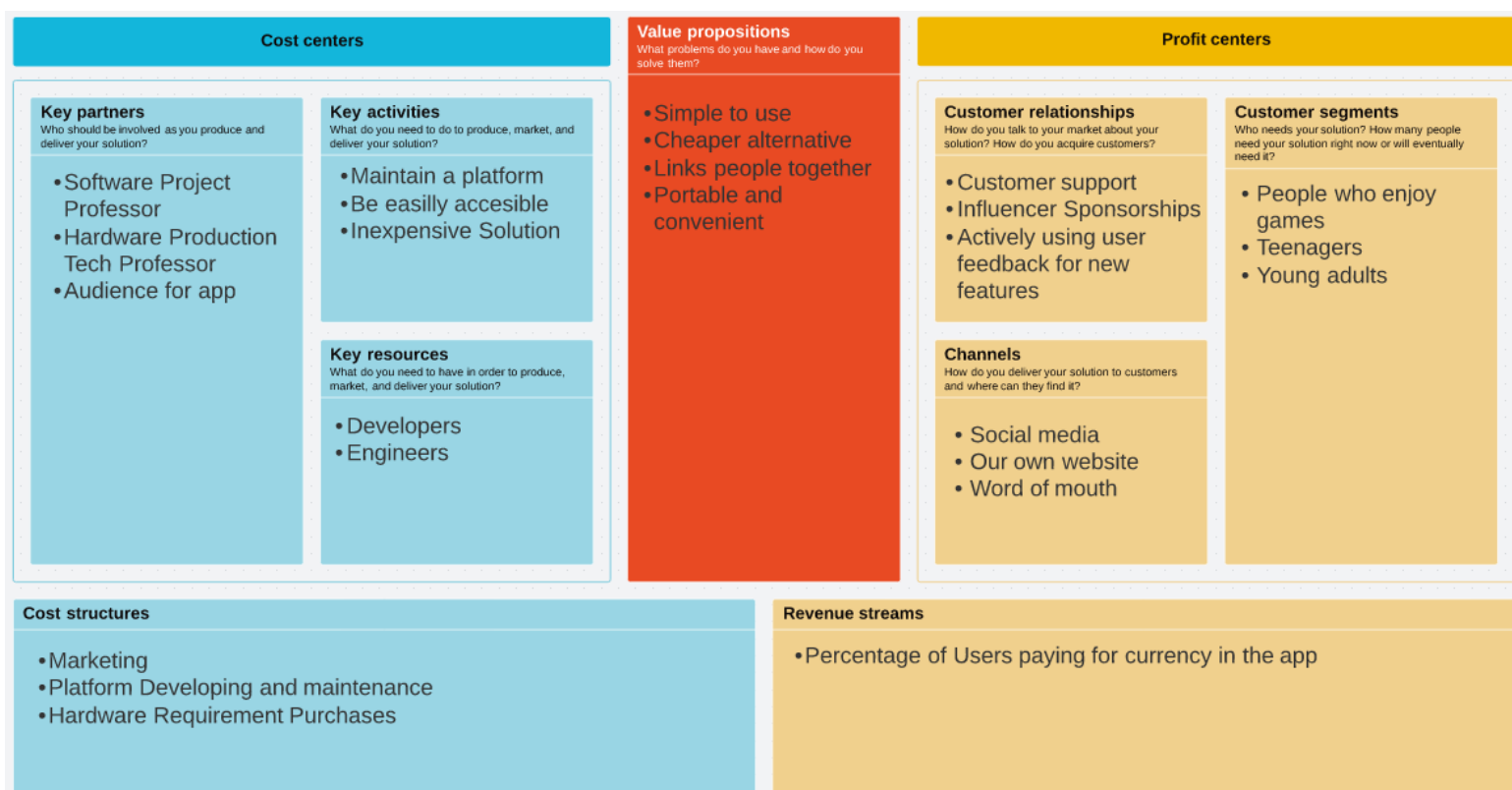
Story	Tasks	START	END	Priority	Low
1	Task 1	10/17/22	10/21/22	Low	Medium
Email/Text User	Task 2	10/19/22	10/22/22	Low	High
	Task 3	10/21/22	10/27/22	Low	
	Task 4	10/22/22	10/31/22	Low	
	Task 5	10/27/22	10/31/22	Low	
2	Task 1	10/19/22	10/27/22	Medium	
Leaderboard System	Task 2	10/21/22	10/31/22	Medium	
	Task 3	10/21/22	10/31/22	Medium	
	Task 4	10/22/22	10/27/22	Medium	
	Task 5	10/28/22	10/31/22	Low	
3	Task 1	11/1/22	11/14/22	High	
Twitch/Youtube Partnership	Task 2	11/1/22	11/14/22	High	
	Task 3	11/1/22	11/14/22	High	
	Task 4	11/14/22	11/30/22	High	
	Task 5	11/27/22	11/30/22	High	
4	Task 1	11/14/22	11/21/22	High	
Customization/Personalization	Task 2	11/14/22	11/21/22	High	
	Task 3	11/14/22	11/21/22	High	
	Task 4	11/21/22	11/30/22	Medium	
	Task 5	11/21/22	11/30/22	Low	
5	Task 1	12/1/22	12/13/22	Medium	
User Development	Task 2	12/5/22	12/13/22	Medium	
	Task 3	12/7/22	12/13/22	Medium	
	Task 4	12/8/22	12/13/22	Medium	
	Task 5	12/10/22	12/13/22	Medium	

List of items group included in the DoD& Explanation

NAME:	TASK	COMPLETE?	How we met DoD:
Ralph	Login/registration		got the login and registration to function
Ralph	connecting to the cloud		got cloud to save username and password
Ralph	Deliverable 2 doc added to repo and sub folder		pasted the doc into the docs subfolder
Elijah	Use proper images for the tabs, not counted as of the 6 images.		added assets and set them as tab images
Elijah	Splash, login and main screens must have landscape and portrait layouts		all screens are able to be rotated into landscape, landscape layout was setup fully
Elijah	Design of the splash screen with the functionality. User clicks on home screen when the app is closed, the splash screen appears for few seconds (i.e. 3 secs), then user landed on main screen.		The splash was implemented and has our company logo and name, shown for 2 seconds
Pradeep	COMMENTS ON EVERY .JAVA AND .XML FILE		comments of our names and id were added to all java and xml files
Pradeep	Implement at least one functionality that requires runtime permissions. Asks for the proper permission. Display proper screen if permission not granted.		The profile screen shows our logo and allows the user to click a button, which asks for permissions, and then can upload a profile picture
Pradeep	Display a snackbar whether permission granted or denied.		
Pradeep	Back key dialog in deliverable 1 must have proper image.		The back key displays an alert box with an image, if on the main app, it sends you back to login/register, and if you are on login/register it exits the app
Pradeep	The app must have a menu, screenshots must show the menu. Must have a minimum of 4 options (whether always, ifRoom or never will depend on the functionality).		We implemented 4 menu options, those being settings, profile, connect and leaderboard.
Pradeep	Menu items which are shown on the menu bar should have proper images. Menu items in the overflow should not have an image. Must have one menu item set to always with image and text.		For the menu, settings shows the icon and name, profile shows the icon, and connect and leaderboard are in the overflow with just their names
Francisco	Design of all the screens in the app. Complete screens of the app without functionality.		All the screens work and function as intended
Francisco	Screens must include a total of minimum 6 images. All images must have minimum of 3 resolutions		We have more than 6 images, such as the backgrounds, our logo, and joystick etc.
Francisco	Settings Fragment creation and settings screen		settings was made and has various options, such as portrait lock and button colours
Francisco	All screens must support English and French.		All strings were translated into French
Francisco	Each fragment must have at least one object with a different style than the default style (i.e. color, type, fontType, fontSize,...etc.		Different styles are on all fragments, such as bold text, or settings having yellow font colour
Pradeep Ralph Elijah Francisco	Minimum of 5 stories and each story must be split to minimum of 5 tasks. Use one of the online tools to build the stories and tasks, i.e. use Trello (https://trello.com/en) or Monday (https://monday.com/) or any other appropriate tool		We wrote up 5 stories and 5 tasks for each, these were then transferred into Trello
Pradeep	Take a screenshot showing clearly the stories and breakdown of tasks with start/end date, size, and priority.		We screenshotted and pasted the stories and tasks, including their start/end dates, size and priority
Elijah	-Tasks which are marked done, explain how did you meet the DoD criteria.		Wrote what tasks are done and typed out how they met the DoD criteria
Pradeep Ralph Elijah Francisco	-List of items you included in the DoD.		Listed all items, they also have a color representing if they are complete

Pradeep Ralph Elijah Francisco	-Business Model Canvas, all the 9 fields are clearly shown and explained.		Created the BMC with all 9 fields fully completed using the program lucid
Ralph	-Screenshot showing you have created the DB on the cloud, with some details and type of DB used.		Added the database along details
Francisco	-Coding work progress since deliverable 1. What additional features/functionality added since deliverable 1.		Wrote up everything that we have added since deliverable 1, such as the additional features and functionality
Pradeep	-A Table records the daily stand-ups outcome, use any tool you like, include a screenshot into the document. Table, include date and info. Show minimum of 3 meetings		We created a table with the times and a screenshot of our meetings, along with the outcomes
Francisco	GitHub Repo link and strategy. All members must contribute to the repo.		Added the repo link and wrote up the strategy. All of us contributed our commits and pushes.

Business Model Canvas



Key Partners

- **Software Project Professor:** Greenlights the software project
- **Hardware Production Tech Professor:** Greenlights the hardware project
- **Audience for app:** The target audience that will install and test the app

Key Activities

- **Maintain a platform:** Updates on the software
- **Be easily accessible:** The app being easily obtainable is what makes people want to obtain it

- **Inexpensive solution:** Reasonable price to use compared to other alternatives

Key Resources

- **Developers:** Development of the software who designed and created the app
- **Engineers:** Development of the hardware who put it together and soldered the wires making it functional

Cost Structures

- **Marketing:** Costs of advertisements and sponsorships
- **Platform Developing and Maintenance:** Costs of app maintenance and product design
- **Hardware Requirement Purchases:** Cost of the hardware and services of building product

Value Propositions

- **Simple to use:** The app isn't complex and is straightforward which will make it easy to use
- **Cheaper alternative:** The software is a controller you can install on your phone, cheaper than going to the store and buying a new controller
- **Links people together:** People will have fun with each other using our product
- **Portable and convenient:** Easy to move around and easy to use whenever wherever

Customer Relationships

- **Customer Support:** Able to help their problems with our product
- **Influencer Sponsorships:** Ask and pay influencers to play our product
- **Actively using user feedback for new features:** Acknowledging and applying feedback to the product

Channels

- **Social media app ads:** Pay the price to run ads on their social media app i.e Paying Google ads to run our ads on YouTube videos
- **Our own Website:** Website, where customers can come to buy the product and link them to the google play.
- **Word of mouth:** test the product and let them review create a blog i.e Twitter or Youtube videos

Customer Segments

- **People who enjoy games:** Our audience is targeted towards people who enjoy games
- **Teenagers:** Easy target to promote due to word of the month
- **Young adults:** Young adults who feel nostalgia towards arcade games will find our product enjoyable

Revenue Streams

- **Percentage of Users paying currency in the app:** Store section where people buy e-currency with real money.